

AMENDMENTS TO THE CLAIMS

Following is a listing of all claims in the present application, which listing supersedes all previously presented claims:

Listing of Claims:

1. (Currently Amended) A ferroelectric capacitor, comprising:
a lower electrode, a dielectric layer, and an upper electrode layer, which are sequentially stacked,
wherein the dielectric layer has a multi-layer structure including a plurality of sequentially stacked ferroelectric films, [[and]] wherein two adjacent ferroelectric films have either different compositions or different composition ratios, and wherein at least one ferroelectric film is a BSO-PZT film.
2. (Original) The ferroelectric capacitor as claimed in claim 1, wherein the ferroelectric capacitor further comprises:
an interlayer disposed in a position selected from the group consisting of between the lower electrode and the dielectric layer, between the upper electrode and the dielectric layer, and both between the lower electrode and the dielectric layer and the upper electrode and the dielectric layer.
3. (Original) The ferroelectric capacitor as claimed in claim 2, wherein the interlayer is a platinum (Pt) layer.

4. (Previously Presented) The ferroelectric capacitor as claimed in claim 12, wherein the dielectric layer further comprises a third ferroelectric film sequentially stacked on the first and second ferroelectric films.

5. (Original) The ferroelectric capacitor as claimed in claim 4, wherein the first through third ferroelectric films have a thickness of 3 nm - 50 nm, 30 nm - 150 nm, and 3 nm - 50 nm, respectively.

6. (Previously Presented) The ferroelectric capacitor as claimed in claim 14, wherein the dielectric layer further comprises a third ferroelectric film sequentially stacked on the first and second ferroelectric films.

7. (Original) The ferroelectric capacitor as claimed in claim 6, wherein the first through third ferroelectric films have a thickness of 3 nm - 50 nm, 30 nm - 150 nm, and 3 nm - 50 nm, respectively.

8. (Original) The ferroelectric capacitor as claimed in claim 4, wherein each of the first through third ferroelectric films are formed of a material selected from the group consisting of a PZT film, a PLZT ($\text{Pb}_{1-x}\text{La}_x\text{Zr}_x\text{Ti}_{1-x}\text{O}_3$) film, and a BSO-PZT film, and wherein adjacent ferroelectric films are formed of a different material.

9. (Original) The ferroelectric capacitor as claimed in claim 6, wherein each of the first through third ferroelectric films are formed of a material selected from the group consisting of a PZT film, a PLZT ($\text{Pb}_{1-z}\text{La}_z\text{Zr}_x\text{Ti}_{1-x}\text{O}_3$) film, and a BSO-PZT film, and wherein adjacent ferroelectric films are formed of a different material.

10. (Original) The ferroelectric capacitor as claimed in claim 4, wherein each of the first through third ferroelectric films are formed of a material selected from the group consisting of a PZT film, a PLZT ($\text{Pb}_{1-z}\text{La}_z\text{Zr}_x\text{Ti}_{1-x}\text{O}_3$) film, and a BSO-PZT film, and wherein adjacent ferroelectric films are formed of the same material but have different composition ratios.

11. (Original) The ferroelectric capacitor as claimed in claim 6, wherein each of the first through third ferroelectric films are formed of a material selected from the group consisting of a PZT film, a PLZT ($\text{Pb}_{1-z}\text{La}_z\text{Zr}_x\text{Ti}_{1-x}\text{O}_3$) film, and a BSO-PZT film, and wherein adjacent ferroelectric films are formed of the same material but have different composition ratios.

12. (Original) The ferroelectric capacitor as claimed in claim 1, wherein the dielectric layer is sequentially stacked first and second ferroelectric films.

13. (Original) The ferroelectric capacitor as claimed in claim 12, wherein the first and second ferroelectric films have a thickness of 3 nm - 50 nm and 30 nm - 150 nm, respectively.

14. (Original) The ferroelectric capacitor as claimed in claim 2, wherein the dielectric layer is sequentially stacked first and second ferroelectric films.

15. (Original) The ferroelectric capacitor as claimed in claim 14, wherein the first and second ferroelectric films have a thickness of 3 nm - 50 nm and 30 nm - 150 nm, respectively.

16. (Original) The ferroelectric capacitor as claimed in claim 12, wherein each of the first and second ferroelectric films are formed of a material selected from the group consisting of a PZT film, a PLZT ($\text{Pb}_{1-z}\text{La}_z\text{Zr}_x\text{Ti}_{1-x}\text{O}_3$) film, and a BSO-PZT film, and wherein the first and second ferroelectric films are formed of a different material.

17. (Original) The ferroelectric capacitor as claimed in claim 14, wherein each of the first and second ferroelectric films are formed of a material selected from the group consisting of a PZT film, a PLZT ($\text{Pb}_{1-z}\text{La}_z\text{Zr}_x\text{Ti}_{1-x}\text{O}_3$) film, and a BSO-PZT film, and wherein the first and second ferroelectric films are formed of a different material.

18. (Original) The ferroelectric capacitor as claimed in claim 12, wherein each of the first and second ferroelectric films are formed of a material selected from the group consisting of a PZT film, a PLZT ($\text{Pb}_{1-z}\text{La}_z\text{Zr}_x\text{Ti}_{1-x}\text{O}_3$) film, and a BSO-PZT film, and wherein the first and second ferroelectric films are formed of the same material but have different composition ratios.

19. (Original) The ferroelectric capacitor as claimed in claim 14, wherein each of the first and second ferroelectric films are formed of a material selected from the group consisting of a PZT film, a PLZT ($\text{Pb}_{1-z}\text{La}_z\text{Zr}_x\text{Ti}_{1-x}\text{O}_3$) film, and a BSO-PZT film, and wherein the first and second ferroelectric films are formed of the same material but have different composition ratios.

20. (Original) The ferroelectric capacitor as claimed in claim 1, wherein the upper electrode and the lower electrode are formed of a single layer of either a metal or a conductive oxide.

21. (Original) The ferroelectric capacitor as claimed in claim 20, wherein the metal is platinum (Pt) or iridium (Ir).

22. (Original) The ferroelectric capacitor as claimed in claim 20, wherein the conductive oxide is iridium oxide (IrO_2) or ruthenium oxide (RuO_2).

23. (Original) The ferroelectric capacitor as claimed in claim 1, wherein the upper and lower electrodes are formed of a sequentially stacked metal layer and a conductive oxide layer.

24. (Original) The ferroelectric capacitor as claimed in claim 23, wherein the metal is platinum (Pt) or iridium (Ir).

25. (Original) The ferroelectric capacitor as claimed in claim 23, wherein the conductive oxide is iridium oxide (IrO_2) or ruthenium oxide (RuO_2).

26 - 47. (Cancelled).